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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,216	07/17/2003	Min-Wen Du		2921
7590	10/19/2005			
Min-Wen Du 19 Pondview Dr. Acton, MA 01720			EXAMINER LUI, DONNA V	
			ART UNIT 2675	PAPER NUMBER

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,216	DU ET AL.	
	Examiner	Art Unit	
	Donna V. Lui	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005 for interview.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 20 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, 6-10 and 20, drawn to a Zhu-Yin or Pin-Yin input method for inputting a phonetic symbol string into a computer, consisting of a keypad, a R-1 refining control window panel, and a R-2 refining control panel, entered through a sequence of operations called Press-Touch-Release (PTR) operations, classified in class 345, subclass 171.
 - II. Claim 11, drawn to a cascade multi-window containing several over-lapped window pages, classified in class 345, subclass 641.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an input method allowing the user to input phonetic strings to output a Chinese character; invention II has separate utility such as providing a user interface such that a cascade of multiple windows is presented to the user, allowing a user to browse and select items from the windows. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Claims 12-19 are improper dependent claims. The dependency of claim 12 is unclear, therefore claims 12-19 are not included in the grouping of claims.

4. During a telephone conversation with Min-Wen Du on September 27, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-10 and 20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Due to the election of Group I for examination, the abstract should be rewritten to compensate for such changes excluding merits of the invention.

Claim Objections

6. **Claims 2, 3, and 7** are objected to because of the following informalities: use of a square symbol for indicating a 'blank key' in claims 2 and 3 on page 49, lines 9-11, 17, 19, 22 and page 51, line 4 respectively; use of a symbol for function keys for claims 2 and 7 on page 50, lines 7, 9, 12, 18 and page 53, lines 8, 10, 13, 15, and 17 respectively. Appropriate correction is required, please omit symbol.
7. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m). Such reference characters are comprised of R-1 and R-2.

8. **Claims 8-10** are objected to because of the following informalities: Use of symbols in claims, namely the Greek symbols: zeta, sigma, and tau. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. **Claims 1 and 6** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specifications give no indication as to the derivation of the refining control window panels, referenced as R-1 and R-2.

10. **Claim 4** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The reduction of a flickering effect, page 51, line 15, is not disclosed in the specifications.

11. **Claims 4 and 8** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specifications give no indication as to the derivation of "the label" nor the purpose and function, but merely the existence of the label is stated in conjunction with the control window panel.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claims 1-10 and 20** are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to

present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

13. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant initially refers to method consisting of a Zhu-Yin keypad and later is referred to as a Zhu-Yin keyboard.

14. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Claims 1 and 6 are merely methods that recite the parts of the keypad for inputting phonetic symbol strings without the inclusion of steps. The omitted steps are: enablement for operation of device, such as steps for activating a first and second control window as applicant labels R-1 and R-2 and the press-touch-release operation.

15. Claims 1 and 6 provides for the use of a keypad for phonetic symbol input, but since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use (as recited in claim 5) without any active, positive steps delimiting how this use is actually practiced.

Claims 1 and 6 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

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16. **Claim 8** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The symbols zeta, sigma, and tau are recited as uses and the purpose, function and steps for deriving such symbols are not indicated in the claims.

17. **Claim 20** recites the limitation "said key-in phase of the Two-phase Sentence Generation Procedure" in page 59, line 19. There is insufficient antecedent basis for this limitation in the claim.

The following art rejections are applied from what is best understood of the claims in view of the 35 USC 112 rejections listed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 1, 3- 6, 8-10, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (Patent no.: US 6,809,725 B1, herein after referred to as "Zhang").

With respect to **Claims 1 and 6**, Zhang discloses a method of displaying keys for characters of the Chinese language such that the characters are displayed in two windows, the first for entering the spelling (*column 1, line 66 through column 2, line 2*) and the second corresponding to the inputted character (*column 1, lines 60-63*). Zhang discloses the selection of keys being achieved through the use of a pointing device, moved in a clockwise direction and sequentially selecting keys for a Chinese character (*column 4, lines 60-64*). Zhang clearly

discloses a method to input Zhu-Yin phonetic symbol strings (*Figure 19*) and English letters for the Chinese character equivalents. Although Zhang does not teach the method of inputting Pin-Yin phonetic symbol strings it would have been obvious for a person of ordinary skill at the time the invention was made to modify the onscreen keyboard as taught by Zhang as to incorporate the Pin-Yin structure of outputting Chinese characters for the purpose of providing an alternative for inputting a phonetic string which is a widely recognized Romanization of the Chinese language.

With respect to **Claims 3 and 8**, note the discussion above pertaining to the limitations of claims 1 and 6. Zhang discloses a first refining control window as shown in figure 6, where element 610 are common phrases associated with the selected phonetic string, element 620 are common spellings of the first phonetic string and element 630 are common spellings of the second phonetic string. It would have been obvious to a person of ordinary skill at the time the invention was made to include in the method of inputting Chinese characters, a step for further limiting the Chinese characters corresponding to the phonetic symbol string in so doing resulting in a final desired Chinese character for the purpose being able to select a phrase or single character and continue Chinese character entry (*column 7, lines 8-11*).

With respect to **Claims 4 and 9**, note the above discussion pertaining to the limitations of Claims 1 and 6. Zhang discloses a second refining control window as shown in figure 5, element 500 (Chinese editor) where a desired Chinese character can be inputted to a location where the cursor resides in the editor window. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a second refining window, as taught by Zhang for the purpose of having the ability to modify previous inputs.

With respect to Claims 5 and 10, note the above discussion pertaining to the limitations of Claims 1 and 6. Zhang discloses a method of using a pointing device such as a mouse to sequentially select in a clockwise direction a series of keys, know to the applicant as press-touch-release, for the desired Chinese character (*column 4, lines 60-64*). The onscreen keyboard includes a backspace key for the user to retract the previous pointing device action. It would have been obvious to a person of ordinary skill in the art to include the method of phonetic symbol string selection in such a way for an onscreen keyboard for the purpose of allowing for more efficient and rapid input of keys.

With respect to Claim 20, note the above discussion pertaining to the limitations of claims 6 and 10.

19. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang in view of Chen et al. (Pub. No.: US 2005/0010392 A1, herein after referred to as "Chen").

Zhang discloses an input device such that the Zhu-Yin (*Figure 4*) and English keys (*Figure 19*), are grouped into common sets on a panel including function keys such as backspace (*Figure 2, element 282, backspace ~ editing button*), space (*Figure 2, element 286, space ~ blank key*), and mode selection (*Figure 19, top row of keys, third key from the left*). Zhang teaches the immediate appearance of possible Chinese characters following a series of selected keys, also know to the applicant as automatic-firing (*column 6, lines 52-60*). Zhang fails to teach the use of a function key capable of exporting text from the system in Unicode code. Chen teaches the use of Unicode in a translator. At the time the invention was made it would obvious to a person of ordinary skill in the art to modify the onscreen keyboard input method of Zhang so as to incorporate a function key for exporting text in Unicode for the purpose of using a single

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encoding scheme for all the world's languages due to the strong movement to use Unicode and replace all the other encodings in computer applications (*Chen: page 1, [0007], lines 11-15 and 16-20*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna V. Lui whose telephone number is (571) 272-4920. The examiner can normally be reached on Monday through Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Donna V Lui
Examiner
Art Unit 2675


KENT CHANG
PRIMARY EXAMINER